

IN THE CLAIMS:

Please cancel claim 67 without prejudice, and amend claims 60, 64-66, and 350 as follows:

Claims 1-59 (previously cancelled)

60. (Currently Amended) Electronic assembly, comprising:

a first plurality of semiconductor dies mounted edge-to-edge, in close proximity to one another, on ~~at least one~~ a first side of a printed circuit board, each semiconductor die electrically connected to the printed circuit board by free-standing, resilient contact structures mounted to each of the semiconductor dies.

61. (Original) Electronic assembly, according to claim 60, wherein:

the semiconductor dies are memory devices.

62. (Original) Electronic assembly, according to claim 60, wherein:

the electronic assembly is a single in-line memory module (SIMM).

63. (Original) Electronic assembly, according to claim 60, wherein:

the resilient contact structures are compliant.

64. (Currently Amended) Electronic assembly, according to claim 60, ~~wherein: the further comprising a second plurality of semiconductor dies are mounted to both sides~~ a second side of the printed circuit board.

65. (Currently Amended) Electronic assembly, according to claim 60, wherein: the freestanding resilient contact structures ~~are formed by: individually bonding~~ comprise:

wires bonded to the semiconductor dies; and

overcoating an overcoat covering at least a portion of the wires ~~contemporaneously with one another.~~

66. (Currently Amended) Electronic assembly, according to claim 60, wherein: the freestanding resilient contact structures comprise ~~are formed by: individually bonding wires to a sacrificial substrate;~~

~~— plating the wires; and~~

~~— gang transferring the plated wires to at least one of the semiconductor dies in a single step~~
plated wires adhered to the semiconductor dies.

67. (Cancelled)

68. (Original) Electronic assembly, according to claim 60, further comprising:
a rigidizing material encapsulating at least a portion of the resilient contact structures.

Claims 69-346 (previously cancelled)

347. (Original) Semiconductor package, comprising:

a first insulating layer;

a first conductive layer disposed on a first surface of the first insulating layer and patterned to have a first plurality of conductive traces;

a second insulating layer;

a second conductive layer disposed on a first surface of the second insulating layer and patterned to have a second plurality of conductive traces;

the first conductive layer being in contact with the second insulating layer;

the second conductive and insulating layers are arranged and disposed so that outer portions of the first plurality of conductive traces are exposed;

a first plurality of electrical contact structures mounted to outer portions of the first plurality of conductive traces; and

a second plurality of electrical contact structures mounted to the second plurality of conductive traces.

348. (Original) Semiconductor package, according to claim 347, wherein:
the first plurality of electrical contact structures extend to a plane; and
the second plurality of electrical contact structures extend to the plane.
349. (Original) Semiconductor package, according to claim 347, wherein:
the first plurality of electrical contact structures are resilient contact structures; and
the second plurality of electrical contact structures are resilient contact structures.
350. (Currently Amended) Semiconductor package, according to claim 347, further comprising:
means for receiving a semiconductor device;
wherein:
the second conductive and insulating layers are arranged and disposed so that inner portions
of the first plurality of conductive traces are exposed for connecting to a semiconductor device; and
further comprising:
means for connecting the semiconductor device to the exposed inner portions of the first
plurality of conductive traces; and
means for connecting the semiconductor device to the second plurality of conductive traces.
~~a first plurality of electrical contact structures mounted to outer portions of the first plurality
of conductive traces; and
a second plurality of electrical contact structures mounted to the second plurality of
conductive traces.~~
351. (Original) Semiconductor device, comprising:
a semiconductor die having a front surface and a back surface;
a plurality of free-standing interconnect structures mounted to the front surface of the
semiconductor die; and
a plurality of free-standing heat-dissipating structures mounted to the back surface of the
semiconductor die.
352. (Original) Semiconductor device, according to claim 351, wherein:
the interconnect structures are resilient contact structures.

353. (Original) Semiconductor device, according to claim 351, wherein:
the interconnect structures are compliant contact structures.
354. (Original) Semiconductor device, according to claim 351, wherein:
the free-standing heat-dissipating structures are wires mounted to the back surface of the semiconductor die.
355. (Original) Semiconductor device, according to claim 351, wherein:
the free-standing interconnect structures are of a first material; and
the free-standing heat-dissipating structures are of a second material which is different from the first material.
356. (Original) Semiconductor device, according to claim 355, wherein:
the free-standing interconnect structures and the free-standing heat-dissipating structures are overcoated with a common material.
357. (Original) Semiconductor device, according to claim 351, further comprising:
a layer of a metallic material disposed between the free-standing heat-dissipating structures and the back surface of the semiconductor die.
the interconnect structures are resilient contact structures.
358. (Original) Semiconductor device, comprising:
a semiconductor die having a front surface and a back surface; and
a plurality of free-standing resilient contact structures mounted to the front surface of the semiconductor die.
359. (Original) Semiconductor device, according to claim 358, further comprising:
conductive pads disposed on the front surface of the semiconductor die; and
wherein:
one contact structure is mounted to each conductive pad.

360. (Original) Semiconductor device, according to claim 358, wherein the resilient contact structures each comprise:

 a wire stem bonded at one end to the front surface of the semiconductor die and configured to have a springable shape; and

 an overcoat material applied over the wire stem and over a portion of the front surface of the semiconductor die.

361. (Original) Semiconductor device, according to claim 358, wherein:
 the resilient contact structures are compliant.

Claims 362-374 (previously cancelled)